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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 09/155,842 | 04/06/2001 | William James Brennan | CI5023A1 | 9223 |

23906 7590 07/16/2003

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
BARLEY MILL PLAZA 25/1128
4417 LANCASTER PIKE
WILMINGTON, DE 19805

EXAMINER

FERGUSON, LAWRENCE D

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1774

DATE MAILED: 07/16/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/155,842

Applicant(s)

BRENNAN ET AL.

Examiner

Lawrence D Ferguson

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-- The MAILING DATE of this communication appears n the cover sheet with the corresp ndence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment mailed May 5, 2003. Claims 4-7 were amended rendering claims 1-7 pending.

Claim Rejections – 35 USC § 103(a)

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (U.S. 5,912,085) in view of Sankey et al. (U.S. 5,800,911).

Ito shows a recording material comprising an opaque polyester substrate (column 3, line 44-52), at least one intermediate layer (cover layer) (column 8, lines 24-31), and at least one ink receiving layer comprising acrylic and polyester resins (column 5, line 66 to column 7, line 45). Ito shows that the substrate comprises at least one copolymerized product of two or more kinds of acid component and glycol component including ethylene terephthalate and ethylene glycol (column 3, lines 5-25) and inorganic particles (column 3, lines 26-35). Ito does not disclose the substrate comprising copolyesterether. Sankey teaches a polyester first layer (substrate) (column 1, lines 37-43 and column 2, lines 24-30) comprising copolyesterether (column 5, lines

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38-67). Ito and Sankey are analogous art because they are both from the field of multilayered polyester material. It would have been obvious to one of ordinary skill in the art to include copolyesterether in the polyester substrate of Ito because Sankey teaches the incorporation of copolyesterether helps produce the required deformation index of the material, which is the average thickness percentage of the layer (column 2, lines 14-20 and column 5, lines 38-65).

Neither reference specifically shows the percentages by weight of the copolyesterethers (claim 1) or the inorganic particles (claim 4). However, such concentrations are properties which can be easily determined by one of ordinary skill in the art. With regard to the limitation of the weight percentages, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The experimental modification of prior art in order to optimize operation conditions (e.g. percentages of weight) fails to render claims patentable in the absence of unexpected results. All of the aforementioned limitations are result effective as they control the ink absorptivity, water resistance, level of slip and handability of the recording material. As such, they are optimizable. It would have been obvious to one of ordinary skill in the art to make the recording material with the limitations of the concentrations of copolyesterethers and inorganic particles since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 USPQ 215.

R sponse to Arguments

4. Objection(s) of claims 4-7 are withdrawn due to Applicant amending the improper multiple dependent claims.

Arguments to rejection made under 35 USC 103(a) as being unpatentable over Ito et al (U.S. 5,912,085) have been considered and are moot based on grounds of new rejection. Applicant argues Ito does not teach or disclose any incorporation of a copolyesterether in a polyester substrate. A secondary reference (Sankey) has been incorporated to show the conventionality of a polyester substrate comprising a copolyesterether.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for

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After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



Lawrence D. Ferguson
Examiner
Art Unit 1774



ELIZABETH MULVANEY
PRIMARY EXAMINER